

REMARKS

The drawings stand objected by the Examiner as failing to comply with 35 C.F.R. 1.84(p)(5). Specifically, the Examiner states that "GR" in the box under start in Figure 8A is not shown, and the rectangles and decision "triangles" in figures 8A and 8B are not described in the Specification.

The Specification has been amended to add the reference character "GR". No new matter has been added. The reference label "GR_T" is already found in the Specification. GR is used in the figures as a symbol for the engaged transmission ratio. The concept of a transmission engaged ratio is found in both the Summary of the Invention (Paragraph 10, lines 9-10), as well as the Detailed Description of the invention (Paragraph 31, line 2).

With regard to the rectangles and decision "triangles" not being described in the Specification, the Detailed Description describes Figures 8A and 8B as being flow chart illustrations of a preferred embodiment of the launch control of the present invention. Applicant is unaware of any Patent Office requirement that each and every feature shown in a patent drawing must be described and provided with a reference numeral in the Specification. The claims, of the present invention are directed to the structure of the clutch, and do not rely on the launch control logic set forth in the flow charts of Figures 8A and 8B for support. In Applicant's view, a description of each box in Figures 8A and 8B would merely reproduce the text already found in the Figures, and would not contribute in any way to improving the description of the invention. Accordingly, no amendment has been made to address this concern.

The Examiner also objects to Figure 1, stating that each Figure should have its own figure number. Applicant respectfully traverses that objection. Applicant is unaware of any Patent Office requirement that each element of a figure be connected to the other elements within the figure by a continuous line. To clarify that all of the elements in Figure 1 comprise a single figure illustrating the entirety of the system in which the inventive clutch is located, a bracket has been added to the figure, and the location of FIG. 1 label moved outside that bracket.

Claims 12-21 and 23 stand rejected by the Examiner under 35 U.S.C. § 112, second paragraph. Specifically, the Examiner states that the limitation "said driving member" does

not have sufficient antecedent basis. The subject claims have amended to provide the necessary antecedent basis.

Claims 1-8, 11, 12, 14-20, 22, 23 and 25-28 stand rejected by the Examiner under 35 U.S.C § 103 (a) as being unpatentable over U.S. Patent 2,907,433 to Maurice et al. in view of U.S. Patent 3,696,901 to Henry. Applicant respectfully traverses that rejection on two bases. First, the cited prior art does not disclose each of the limitations found in the claims. Second, there is no motivation to combine the references in the fashion proposed by the Examiner.

Each of the independent claims, 1, 12, 15 and 22 has flyweights with wedging members fixed thereto and disposed between opposing surfaces. Neither of the references cited discloses such as structure. Although the Examiner states that wedging members are received between opposed surfaces in Maurice et al., this is inaccurate in Applicant's view. Maurice shows flyweights 19 which do not have wedging members fixed thereto. Flyweights 19 are rotatably fixed at one end to a casing and pivot axially outwardly, with this axial extension displacing the pressure plate toward the flywheel to provide desired clamping. In contrast, the present invention employs wedging members which contact both a fixed reaction plate and an axially movable plate. Applicants have amended independent claims 1, 12, 15 and 22 to specify the orientation of a pivot axis of the flyweights to emphasize the differences in structure between the present invention and Maurice et al. Further, the structures of Maurice et al. and Henry are totally incompatible.

The cited references suggest no motivation to combine them with each other in the fashion suggested by the Examiner. The Examiner does not even attempt to describe how the parts of the separate disclosures would be physically modified to make them compatible. The centrifugal clutch of Henry is a shoe brake or shoe clutch in which arcuate braking members engage a cylindrical drum. This brings bias the brake shoe members in a radial direction away from engagement with a drum. The structure of Maurice et al., is discussed above, has flyweights which pivot in a substantial axial direction. There is no apparent feature or element in the structure of Maurice et al. which could be acted on by the spring of Henry in the manner hinted at by the Examiner. The structure of Maurice et al. would need to be extensively reworked to receive a spring like that shown in Henry. Neither of the cited references suggest a motivation for such a reworking.

Claims 10, 13 and 24 stand rejected by the Examiner under U.S.C. § 103 (a) as being unpatentable over U.S. Patent 2,907,433 to Maurice et al. in view U.S. Patent 3,696,901 to Henry as applied by the Examiner to independent claims 1, 12, 15 and 22, and further in view of U.S. Patent 4,646,891 to Braun. The Examiner characterizes Braun as teaching the use of incipient engagement engine speed and other engagement parameters to perform the engagement and disengagement of the clutch.

Applicant respectfully traverses the Examiner's conclusion with respect to the obviousness of claims 10, 13 and 24. Specifically, none of the cited references teach a structure which provides the claimed hysteresis (by the clutch remaining at maximum engagement when said driving member assembly is rotating at a disengagement engine speed less than said lock up engine speed) as illustrated in Figure 2 and described in each of claims 10, 13 and 24. In those claims, the clutch remains fully engaged following line 76 of Figure 2 even after engine speed has dropped below $ES_{LOCK\ UP}$ 72. None of the cited prior art references teaches an open loop mechanism which provides the desired hysteresis.

In light of the above amendments and remarks, Applicant respectfully requests allowance of the application and notification of the same.

The Commissioner is hereby authorized to charge any fees which may be required or credit any overpayment to Deposit Account No. 05-0275.

Respectfully submitted,



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Amendments to the Drawings:

Figures 1 and 4 have been amended. Figure 1 has been amended to introduce a bracket and to relocate the label "FIG 1". Figure 4 has been amended to correct a labeling error. Reference numeral 28 has been substituted for reference numeral 26.